19. MUGGER (CROCODYLUS PALUSTRIS) EATING SOFT-SHELL TURTLE

On 4 August 1988, as I sat watching crocodiles from Jogimahal in the Ranthambhor National Park. together with Shri V.D. Sharma, Chief Wildlife Warden of Rajasthan and Shri J.S. Nathawat, Field Director of the Park, I saw a large soft-shell turtle floating upside down. Close by was the snout of a fair sized mugger. The legs and the head of the turtle jutted out in rigor mortis. The crocodile grabbed these protuberances and pivoted around on the surface of the water, rotating the large flat carapace of the turtle also into a spin, amidst considerable splashing. This, the crocodile did on a number of occasions with respites in between and with the shell coming to rest sometimes on its back with the undersurface showing and sometimes with the carapace in view. A powerful monocular lens showed that the crocodile had been able to tear out certain portions of the legs, which showed dark blood and torn pieces of flesh. There was no attempt to crush the flat and narrow though outsize soft-shell. It is possible that the very large sized body of this soft-shell turtle had resulted in its floating on the top and prevented the

crocodile from pulling it under water. Its actions had aroused the interests of 8 other crocodiles, which swam and watched it while floating on the water from a distance of 2 to 20 metres. One crocodile, almost as large as the one which was in possession of the carcass, swam almost within touching distance of the floating carcass, but did not actually grab it. Its attentions prompted the crocodile-in-possession to swim away with the carcass of the turtle into a bed of reeds and thus out of view. It progressed with the shell with the carapace upwards being held in the jaws of the crocodile and being pushed from behind as the crocodile swam.

While the distance prevented the precise identification of the species of turtle, its flat, oval shape, plain surface of the carapace on the back and the yellow colour of the underside seemed to indicate that it was a very large Indian Flapshell Turtle (Lissemys punctata punctata). It was most definitely a soft-shell turtle.

August 27, 1988.

RANJITSINH

20. THE GANGES SOFT-SHELL TURTLE (*TRIONYX GANGETICUS* CUVIER) FROM VADODARA CITY

Gujarat State has been affected by drought for the last three years. Most of the rivers, lakes and ponds have been going dry. I record here occurrence of a species of turtles not reported previously from Vadodara city.

The Ganges soft-shell turtle (Trionyx gangeticus) occurs in the River Tapi and R. Narmada (Das 1985), River Mahi, R. Vishavamitri and in R. Sabarmati at the confluence with River Vartak, Temple tank of Daker (Panch Mahals) and lakes and ponds around Vadodara city. Also reported from the Malegaon forest of the Dangs district (Sharma 1982).

The Raja Rani talao (= pond) near the Panigate area of Vadodara city dried up during the month of April 1988. The turtles were in a difficult situation as only a small muddy puddle remained. During the day the turtles moved in the puddle and the turtle's head was often seen coming out for breathing. They tried to migrate from the talao at night and were seen on the adjoining road, but there is no other water reservoir nearby.

¹A report that more than one hundred Indian roofed terrapin, *Kachuga tecta* (Gray) were collected by Mr. Dev Raj Matang and Mr. Jayanti Golaniya from the Sabarmati river near the Indroda village & Koba village of the Gandhinagar district.

We removed 67 (Table 3) of the turtles from the Raja Rani talao and after measurement (Tables 1 & 2) released them in the Sarasiya talao near the Varasiya area of Vadodara city. The turtle transfer operation was done by the zoo staff.

The carapace colour is dark olive-green above with no markings on the shell. The head dark greenish, with three to five oblique black streaks and a black bar from the eye to the nape. These markings are broken in most of the specimens and entirely lost in old specimens, with carapace length above 85.0 cm. The plastron was pale yellow and some were light pink-white. The callosities were not well defined.

The shape of carapace was low humped and oval, and in old specimens, well humped. A deep groove on the middle line of the carapace and two tumbler-shaped bones developed near the bridge of the carapace and plastron on the marginal scute between fore and hind feet, in some of the old specimens.

56 (84%) out of 67 turtles were excess of size mentioned in the available literature (71.0 cm. carapace length; Das 1985). During the operation smaller turtle's size, carapace length (CL) 35.0 cm.; carapace width (CW) 30.5 cm., and plastron length (PL)